

NAIL HEADS OF A NAIL ROW

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 This invention relates to a nail row, particularly to one whose nail heads are strong enough to endure striking and have great combination force after nailed in workpieces.

2. Description of the Prior Art

10 A conventional nail row 10, as shown in Figs. 1 and 2, is composed of a plurality of T-shaped nails 11 connected together alongside. Each nail 11 is formed integral with a nail head 111 and a nail shank 112, and the nail head 111 has its topside formed with a striking
15 portion 113 a little wider than the thickness of the nail shank 112 for the striking device (P) of a nailing gun to strike thereon and nail two workpieces together. Further, each nail shank 112 has the surface of its front and rear side respectively provided with a plurality of horizontal
20 recessed lines 114 parallel to the lower plane of the nail head 111. Furthermore, when the nails 11 of the conventional nail row 10 are connected together alongside, the topsides of the nails 11 are respectively positioned at different heights so as to form an oblique
25 nail row 10 with preset inclination, applicable to a nailing gun with an oblique nail cartridge.

A horizontal or an oblique nail row 10 has the nail

shanks 112 of its nails 11 respectively nailed in workpieces to combine them together, and the horizontal recessed lines 114 of the nail shank 112 are able to increase frictional resistance between the nail shanks 112 and the workpieces so as to enhance their combination strength. However, the horizontal recessed lines 114 of the nail shank 112 are too short to produce enough frictional resistance, unable to obtain an excellent effect of combination. In addition, the nail head 111 of the nail 11 only serves as a striking portion and the plane under the nail head 111 can do nothing but rest on the workpiece 20, both of them unable to help strengthen combination of the workpiece 20.

SUMMARY OF THE INVENTION

The objective of the invention is to offer the nail heads of a nail row, respectively formed with two symmetrical oblique insert members respectively composed of a horizontal plane and an inclined plane connected with each other so as to increase the striking enduring strength of the nail head and enable the nail to be nailed in a workpiece smoothly with the help of a sharp nailing portion of the nail head, able to nail and combine workpieces together comparatively firmly.

BRIEF DESCRIPTION OF DRAWINGS

This invention will be better understood by referring to the accompanying drawings, wherein:

Fig. 1 is a perspective view of a conventional

oblique nail row:

Fig. 2 is a cross-sectional view of the conventional oblique nail row:

Fig. 3 is a cross-sectional view of the nail of the conventional nail row nailed in workpieces:

Fig. 4 is a perspective view of a nail row in the present invention:

Fig. 5 is a front view of the nail row in the present invention:

Fig. 6 is a cross-sectional view of the nail of the nail row nailed in workpieces in the present invention: and

Fig. 7 is a cross-sectional view of two nails of the nail row reversely nailed in workpieces in the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of a nail row 30 in the present invention, as shown in Figs. 4 and 5, is composed of plurality of T-shaped nails 40 connected together alongside. Each nail 40 is formed with a nail head 41 and a nail shank 42, and the distance between the front and the rear side of the nail head 41 is larger than the thickness of the nail shank 42. The nail head 41 has its topside formed with a flat striking surface 411, which has its left and right side respectively extending straight downward to the lowermost end of the nail shank 42 and

forming a connecting portion 43 for connecting the nails 40 together to make up the nail row 30 by adhesives. When all the nails 40 of the nail row 30 are connected together alongside, their topsides are respectively
5 positioned at different heights to form an oblique nail row 30 with a preset inclination.

The nail head 41 has two symmetrical oblique insert members 412 respectively formed under the protruding portion of its front and rear side. Each
10 oblique insert member 412 is composed of a horizontal plane 4121 and an inclined plane 4122 connected with each other in a ratio of 2:1 in length. The horizontal plane 4121 is parallel to the flat striking portion 411 of the nail head 41, while the inclined plane 4122 forms an
15 acute angle to the vertical side of the nail head 41 to make up a sharp nailing portion 413. In addition, the nail shank 42 has the surface of its front and rear side respectively provided with a plurality of oblique recessed lines 421 spaced apart equidistantly from an
20 upper side to a lower side and parallel to the inclined plane 4122 of the oblique insert member 412 of the nail head 41.

In using, as shown in Figs. 5 and 6, the oblique nail row 30 is fitted in the oblique nail cartridge of a
25 nailing gun and then the nails 40 of the nail row 30 are orderly and respectively struck out and nailed in workpieces 50 by a nail striking device (P) of the nailing

gun. Being a plane, the nail striking surface 411 of the nail head 41 can contact with the nail striking device P at a right angle to enable the nail 40 to be impartially nailed into the workpieces 50. In addition, the
5 comparatively long horizontal plane 4121 of the oblique insert member 412 and the nail striking surface 411 of the nail head 41 are formed therebetween with a preset thickness which is strong enough to resist the striking force of the nail striking device (P), preventing the nail
10 head 41 from deformed excessively or broken and enabling the nail 40 to be nailed into the workpieces 50 smoothly. Additionally, when the nail head 41 is struck by the nail striking device (P), the sharp nailing portion 413 of the oblique insert member 412 of the nail head 41
15 can be deeply stuck in the workpiece 50, and the entire oblique insert member 412 and even the whole nail head 41 can also be firmly stuck into the workpiece 50. Thus, the horizontal plane 4121 and the inclined plane 4122 of the oblique insert member 412 are combined with the
20 workpiece 50 by mutual engagement of different levels, able to let the nail 40 and the workpiece 50 combined together with great stability and firmness.

Further, the oblique recessed marks 421 of the nail shank 42 of this invention are respectively longer than
25 the horizontal recessed lines 114 of the conventional nail shank 112, as shown in Fig. 6. Therefore, after the nail 40 is nailed into the workpiece 50, the frictional

resistance between them will be enhanced to increase their combination strength.

Furthermore, as shown in Fig. 7, in case work pieces 50 need to be nailed together with plural nails 40 of this invention, every two nails 40 can be positioned reversely in the direction and nailed in the workpieces 50, that is, the sharp nailing portions 413 of the oblique insert members 412 of every two nails 40 are positioned reversely and symmetrically to be orderly nailed in the workpieces 50, thus able to enhance the combination strength of the workpieces 50.

As can be understood from the above description, this invention has the following advantages.

1. The nail head 41 of the nail 40 has its front and rear side respectively formed with an oblique insert member 412 and a sharp nailing portion 413, and the nail shank 42 of the nail 40 has the surface of its front and rear respectively provided with a plurality of oblique recessed lines 421, increasing the combination strength of the nail 40 with the workpieces 50.

2. The oblique nail row 30 of this invention is applicable to a nailing gun with an oblique nail cartridge, enabling the nailing gun to carry out nailing work at any position of workpieces and facilitating operation of the nailing gun.

While the preferred embodiment of the invention has been described above, it will be recognized and

understood that various modifications may be made therein and the appended claims are intended to cover all such modifications that may fall within the spirit and scope of the invention.

5

10

15

20

25